

9097250 TOSHIBA (DISCRETE/OPTO)

56C 07319 DT-33-19

SILICON PNP EPITAXIAL TYPE (PCT PROCESS)

# 2SA1329

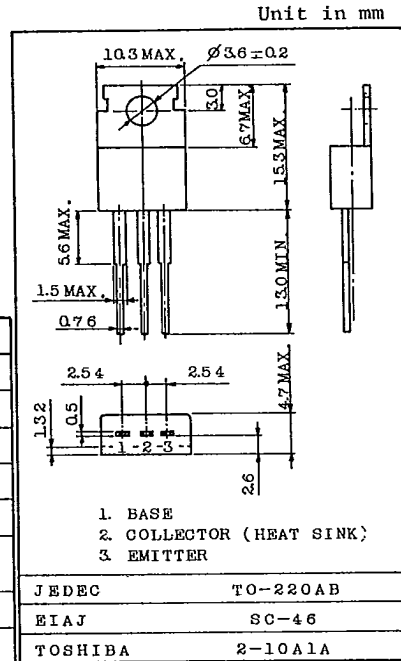
HIGH CURRENT SWITCHING APPLICATIONS.

**FEATURES:**

- Low Collector Saturation Voltage  
:  $V_{CE(sat)} = -0.4V(\text{Max.})$  at  $I_C = -6A$
- High Speed Switching Time :  $t_{stg} = 1.0\mu s(\text{Typ.})$
- Complementary to 2SC3346

**MAXIMUM RATINGS (Ta=25°C)**

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V <sub>CB0</sub>	-80	V
Collector-Emitter Voltage	V <sub>CE0</sub>	-80	V
Emitter-Base Voltage	V <sub>EB0</sub>	-6	V
Collector Current	I <sub>C</sub>	-12	A
Base Current	I <sub>B</sub>	-2	A
Collector Power Dissipation (Tc=25°C)	P <sub>C</sub>	40	W
Junction Temperature	T <sub>j</sub>	150	°C
Storage Temperature Range	T <sub>stg</sub>	-55 ~ 150	°C



Mounting Kit No. AC75  
Weight : 1.9g

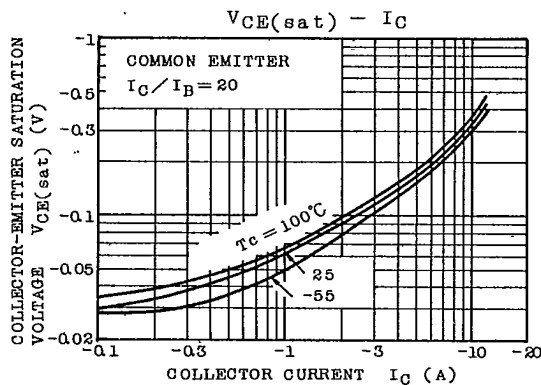
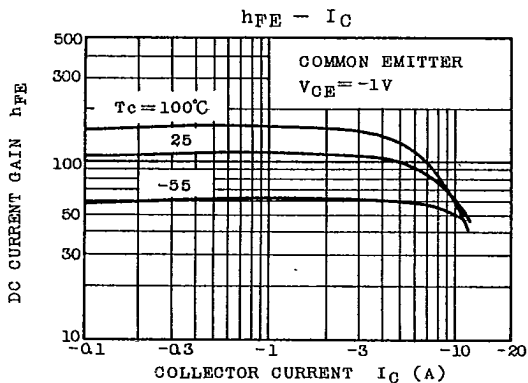
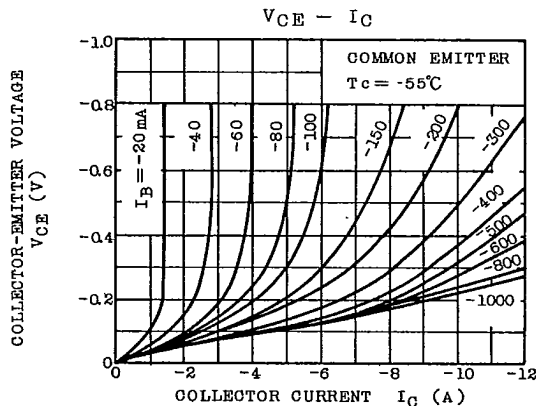
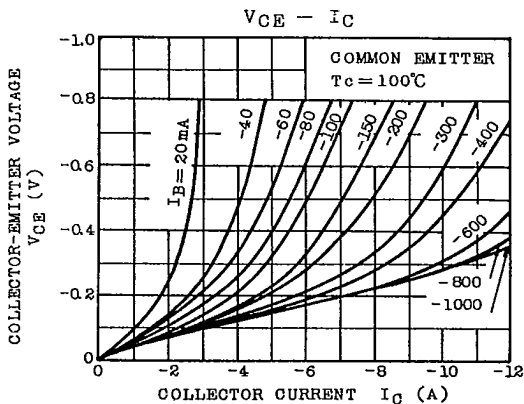
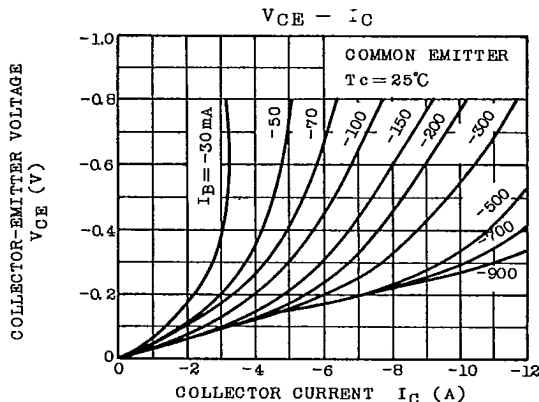
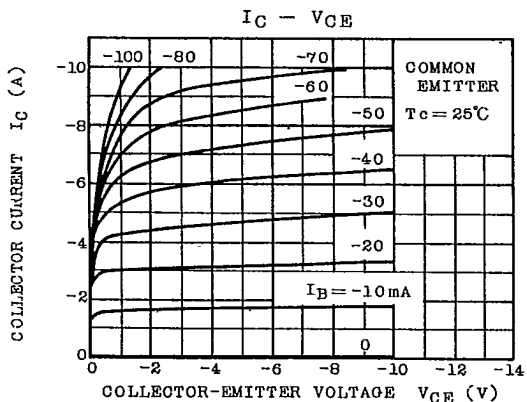
**ELECTRICAL CHARACTERISTICS (Ta=25°C)**

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I <sub>CB0</sub>	V <sub>CB</sub> = -80V, I <sub>E</sub> = 0	-	-	-10	μA
Emitter Cut-off Current		I <sub>EB0</sub>	V <sub>EB</sub> = -6V, I <sub>C</sub> = 0	-	-	-10	μA
Collector-Emitter Breakdown Voltage		V <sub>(BR)CEO</sub>	I <sub>C</sub> = -50mA, I <sub>B</sub> = 0	-80	-	-	V
DC Current Gain		h <sub>FE(1)</sub> (Note)	V <sub>CE</sub> = -1V, I <sub>C</sub> = -1A	70	-	240	
		h <sub>FE(2)</sub>	V <sub>CE</sub> = -1V, I <sub>C</sub> = -6A	40	-	-	
Saturation Voltage	Collector-Emitter	V <sub>CE(sat)</sub>	I <sub>C</sub> = -6A, I <sub>B</sub> = -0.3A	-	-0.2	-0.4	V
	Base-Emitter	V <sub>BE(sat)</sub>	I <sub>C</sub> = -6A, I <sub>B</sub> = -0.3A	-	-0.9	-1.2	
Transition Frequency		f <sub>T</sub>	V <sub>CE</sub> = -5V, I <sub>C</sub> = -1A	-	50	-	MHz
Collector Output Capacitance		C <sub>ob</sub>	V <sub>CB</sub> = -10V, I <sub>E</sub> = 0, f = 1MHz	-	400	-	pF
Switching Time	Turn-on Time	t <sub>on</sub>		-	0.3	-	μs
	Storage Time	t <sub>stg</sub>		-	1.0	-	
	Fall Time	t <sub>f</sub>		-I <sub>B1</sub> = I <sub>B2</sub> = 0.3A DUTY CYCLE ≤ 1%	-	0.5	

Note : h<sub>FE(1)</sub> Classification O : 70 ~ 140, Y : 120 ~ 240

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